

Appl. No. 10/661,367

Amdt. dated March 30, 2006

Reply to Office Action of February 8, 2006

Atty. Ref. 81912.0015

Customer No. 26021

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An optical semiconductor relay comprising:
a light emitting element converting an electrical signal into an optical signal;
a first photodiode array receiving the optical signal from the light emitting element, the first photodiode array converting the optical signal into an electrical signal;
a first diode having one electrode connected to one end of the first photodiode array;
a MOSFET having a gate terminal connected to other electrode of the first diode, and a source terminal connected to other end of the first photodiode array;
a second photodiode array receiving the optical signal from the light emitting element, the second photodiode array converting the optical signal into an electrical signal, and having both ends connected to the respective electrodes of the first diode; and
a control circuit including an impedance element connected between the gate and source terminals of the MOSFET, a bipolar transistor having base and collector terminals connected to both terminals of the impedance element, respectively, and a second diode connected between an emitter and base terminals of the bipolar transistor,
wherein an anode of the second diode is connected to the emitter terminal of the bipolar transistor and the source terminal of the MOSFET, and a cathode of the second diode is connected to a cathode end of the first photodiode array.

2. (Canceled)

3. (Original) The optical semiconductor relay according to claim 1,
wherein a plurality of photodiodes of a same polarity are connected in series in each of the first and second photodiode arrays, and the photodiodes constituting

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the first photodiode array has connection areas larger than those of the photodiodes constituting the second photodiode array.

4. (Original) The optical semiconductor relay according to claim 1,
wherein an anode electrode of the first diode is connected to an anode end of the first photodiode array

5. (Currently amended) The optical semiconductor relay according to claim 2
1,
wherein the impedance element is a resistor.

6-10. (Canceled)

11. (New) The optical semiconductor relay according to claim 3, wherein an anode electrode of the first diode is connected to an anode end of the first photodiode array.

12. (New) The optical semiconductor relay according to claim 3, wherein the impedance element is a resistor.

13. (New) The optical semiconductor relay according to claim 4, wherein the impedance element is a resistor.